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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/540,105	03/31/2000	Jean-Claude Sarfati	11345/011001	1758

22511   7590   06/04/2003

ROSENTHAL & OSHA L.L.P.
1221 MCKINNEY AVENUE
SUITE 2800
HOUSTON, TX 77010

EXAMINER
LEE, CHRISTOPHER E

ART UNIT	PAPER NUMBER
2189	

DATE MAILED: 06/04/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Action Summary

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _24 April 2003_ .

2a) ☐ This action is **FINAL**.　　2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under _Ex parte Quayle_, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-4,6,9,13,20-22,25-29,31,34-36,39 and 43-53_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-4,6,9,13,20-22,25-29,31,34-36,39 and 43-53_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

　　If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____ .

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

　　a) ☐ The translation of the foreign language provisional application has been received.

15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Receipt Acknowledgement

1.   Receipt is acknowledged of the request filed on 24th of April, 2003 for a Request for Continued

Examination (RCE) under 37 CFR 1.114 based on the Application No. 09/540,105, which the request is

acceptable and an RCE has been established. Claims 1-3, 6, 20-22, 31, 39, 43, 44 and 50-53 have been

amended; no claim has been canceled; and no claim has been newly added. Currently, claims 1-4, 6, 9,

13, 20-22, 25-29, 31, 34-36, 39 and 43-53 are pending in this application.

Claim Objections

2.   Claims 1, 39 and 51 are objected to because of the following informalities:

In the claims 1 and 51, the subject matter "a receiver decoder" should be respectively substituted

by --a receiver/decoder-- in light of the specification. Appropriate correction is required.

In the claim 39, line 1, substitute "an" by --a--.

3.   Claims 44 and 51 are objected to under 37 CFR 1.75(c), as being of improper dependent form for

failing to further limit the subject matter of a previous claim.

Those amended claims 44 and 51 are dependent claims of the independent claim 1, wherein the

claim 1 recites the preamble such that "A method of downloading software in native code to a

receiver/decoder, comprising the steps, **at the receiver/decoder**". However, its dependent claim 44

recites the limitation "formatting the plurality of data loader modules as respective tables, the table having

the same respective table identification ("TID") and respective different table identification extensions

("TID-extensions") **at a transmission system**". Also, its dependent claim 51 recites the limitation

"transmitting a second loader included in said bitstream, **at a transmission system**". Therefore, the

limitations in those amended claims 44 and 51 fail to further limit the subject matter of the previous claim

1 since the scope of the amended claims 44 and 51 including the subject matters "receiver/decoder and

transmission system" is wider than the scope of the previous claim 1 including the subject matter

"receiver/decoder". Applicant is required to cancel the claim(s), or amend the claim(s) to place the

claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim Rejections - 35 USC § 103

4.   The text of those sections of Title 35, U.S. Code not included in this action can be found in a

prior Office action.

5.   Claims 1, 2, 9, 20, 21, 26, 27, 31, 39, 43, 46 and 51 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Menand et al. [EP 0 680 213 A2; cited by the Applicant; hereinafter Menand'213] in

view of Steinberg et al. [US 6,006,039 A; Steinberg].

Referring to claim 20, Menand'213 discloses a receiver/decoder (i.e., AVI receiver/signal

decoder; See Fig. 1 and Abstract) comprising: a receiver (i.e., receiver; See col. 2, line 36) for receiving a

bitstream (i.e., packet data stream; See col. 1, line 26-28) including software (See col. 6, lines 16-18 and

23-41); storage means (i.e., RAM read/write memory 412 of Fig. 1); and downloading means (i.e., system

loader; See col. 2, line 37) for downloading into said storage means a loader (i.e., autostart module; See

col. 2, lines 40-43 and col. 7, lines 42-50) for loading said software from said bitstream (See col. 2, line

36 through col. 3, line 2 and col. 7, lines 28-53).

Menand'213 does not expressly teach said loader and said software are in native code (i.e., hardware

specific code, which is directly executable by a microprocessor).

Steinberg discloses a method for configuring a camera through external means (Fig. 1), wherein said

method sets a loader and a software (an operating system of a camera) through transmitter and receiver

(external means), i.e., downloading a native code (i.e., an executable code) for redoing a firmware (i.e.,

patching firmware; See col. 1, lines 61-64; i.e., wherein in fact that said method sets an operating system

of a camera through an external means, i.e., downloading an executable code for redoing a firmware

clearly anticipates that said loader and said software (i.e., downloaded to said receiver/decoder) are in

native code (i.e., directly executable code by Processor 122 of Fig. 4 as a new operating system)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to have applied said method of downloading in native code, as disclosed by Steinberg, to said

receiver/decoder system, as disclosed by Menand'213, so as to provide the capability of changing said

loader and said software (i.e., camera operating system) and downloading said loader and said software in

native code (i.e., executable code; See Steinberg, col. 2, lines 47-50) with the advantage of allowing said

loader and said software in said bitstream (i.e., application) to execute faster than if each byte in said bit

stream must interpreted and executed at run-time, which is well know to one of ordinary skill in the art at

the time the invention was made, as shown in Pedersen [US 5,961,586 A] as a prior art of back-up

reference (See Pedersen, col. 11, lines 6-7 and lines 11-13).

Referring to claim 21, Menand'213, as modifies by Steinberg, discloses means for deleting (i.e.,

freeing; See Menand'213, col. 2, line 56) said downloaded data loader (i.e., autostart module;

Menand'213) from said storage means after said software (i.e., application in native code; See

Menand'213, col. 6, lines 16-18 and 23-41; See Steinberg, col. 1, lines 61-64) has been downloaded from

said bitstream (See Menand'213, col. 2, lines 57-58 and col. 7, lines 51-53).

Referring to claim 26, Menand'213 discloses said receiver/decoder is arranged to download

tables (i.e., directory modules; See col. 2, lines 14-17 and lines 36-40).

Referring to claim 27, Menand'213 discloses said downloading means (i.e., system loader) is

arranged to download a table (i.e., a directory module; See col.2, lines 36-40) having a table identification

("TID"; i.e., module identification for directory module) and a predetermined table identification

extension ("TID-extension"; i.e., module identification for code/data module; See directory module 326

and module 328 in Fig. 4) so as to download a directory table (i.e., directory module; See col. 2, lines 14-

17 and lines 36-38 and col. 7, lines 28-38), to determine from the content of said directory table said TID-

extensions of module tables (See col. 14, lines 4-10), and to download said module tables (See col. 14,

lines 20-23) having the same TID (i.e., the same directory module identification; See col. 14, lines 41-44)

as that of said downloaded directory table (i.e., directory module) and TID-extensions (e.g., code module identifier) determined from said downloaded directory table (See directory module 326 and module 328 in Fig. 4) so as to download said loader (e.g., code module). Refer to col. 13, line 9 through col. 15. line 1.

Referring to claim 31, Menand'213, as modifies by Steinberg, discloses said downloading means (i.e., system loader; Menand'213) is arranged to download a second loader (i.e., new code module; See Menand'213, col. 7, lines 49-51) included in said software (i.e., application in native code; See Menand'213, col. 6, lines 16-18 and 23-41; See Steinberg, col. 1, lines 61-64) included in said bitstream (i.e., packet data stream; Menand'213) for downloading one of said first-mentioned loader (i.e., autostart module; Menand'213) and said software.

Referring to claim 39, Menand'213 discloses a signal (i.e., AVI signal; See col. 1, lines 26-28) including at least one loader (i.e., autostart module) for loading a software (i.e., application; See col. 6, lines 16-18 and 23-41) into a receiver/decoder (i.e., AVI receiver/signal decoder; See Fig. 1 and Abstract), and said software associated with said at least one loader (See col. 2, lines 43-49), said at least one loader being divided into a plurality of modules (i.e., a plurality of code modules) and said software associated with said at least one loader being divided into a respective plurality of modules (i.e., a plurality of associated data modules to said code modules; See col. 1, line 53 through col. 2, line 24). Menand'213 does not expressly teach said software is in native code (i.e., hardware specific code, which is directly executable by a microprocessor).

Steinberg discloses a method for configuring a camera through external means (Fig. 1), wherein said method sets a software (an operating system of a camera) through transmitter and receiver (external means), i.e., downloading a native code (i.e., an executable code) for redoing a firmware (i.e., patching firmware; See col. 1, lines 61-64; i.e., wherein in fact that said method sets an operating system of a camera through an external means, i.e., downloading an executable code for redoing a firmware clearly

anticipates that said software (i.e., downloaded to said receiver/decoder) is in native code (i.e., directly executable code by Processor 122 of Fig. 4 as a new operating system)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied said method of downloading in native code, as disclosed by Steinberg, to said receiver/decoder system, as disclosed by Menand'213, so as to provide the capability of changing said software (i.e., camera operating system) and downloading said software in native code (i.e., executable code; See Steinberg, col. 2, lines 47-50) with the advantage of allowing said software in said bitstream (i.e., application) to execute faster than if each byte in said bit stream must interpreted and executed at run-time, which is well know to one of ordinary skill in the art at the time the invention was made, as shown in Pedersen [US 5,961,586 A] as a prior art of back-up reference (See Pedersen, col. 11, lines 6-7 and lines 11-13).

Referring to claim 1, the method steps of claim 1 are inherently performed by the apparatus of claim 20, and therefore the rejection of claim 20 applies to claim 1.

Referring to claim 2, the method steps of claim 2 are inherently performed by the apparatus of claim 21, and therefore the rejection of claim 21 applies to claim 2.

Referring to claims 9 and 46, the method steps of claims 9 and 46, respectively, are inherently performed by the apparatus of claim 27, and therefore the rejection of claim 27 applies to claims 9 and 46.

Referring to claim 43, the method steps of claim 43 are inherently performed by the apparatus of claim 39, and therefore the rejection of claim 39 applies to claim 43.

Referring to claim 51, the method steps of claim 51 are inherently performed by the apparatus of claim 31, and therefore the rejection of claim 31 applies to claim 51.

6.   Claims 3, 4, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menand'213 [EP 0 680 213 A2] in view of Steinberg [US 6,006,039 A] as applied to claims 1, 2, 9, 20,

21, 26, 27, 31, 39, 43, 46 and 51 above, and further in view of Bowen et al. [US 5,367,571 A; hereinafter Bowen].

Referring to claims 22 and 23, Menand'213, as modified by Steinberg, discloses all the limitations of claims 22 and 23 respectively except that does not teach said receiver/decoder further comprising a non-volatile memory, which is a Flash memory volume.

Bowen discloses a subscriber terminal, wherein a non-volatile memory (i.e., FLASH EPROM 134 of Fig. 7), which is a Flash memory volume (See col. 7, lines 54-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted said non-volatile Flash memory volume, as disclosed by Bowen, for said storage means (i.e., RAM read/write memory), as disclosed by Menand'213, as modified by Steinberg, for the advantage of saving a lot of time being spent re-downloading data since it is not necessary for said receiver/decoder to download again said data after said receiver/decoder is off and on thanks to said non-volatile Flash volume, which keeps said data under said non-volatile condition, which is a common sense to one of ordinary skill in the art at the time the invention was made.

Menand'213, as modified by Steinberg and Bowen, discloses said non-volatile Flash memory volume (i.e., FLASH EPROM 134 of Fig. 7; Bowen) stores said downloaded data loader after said software (i.e., application in native code; See Menand'213, col. 6, lines 16-18 and 23-41; See Steinberg, col. 1, lines 61-64) has been downloaded from said bitstream.

Referring to claim 3, the method steps of claim 3 are inherently performed by the apparatus of claim 22, and therefore the rejection of claim 22 applies to claim 3.

Referring to claim 4, the method steps of claim 4 are inherently performed by the apparatus of claim 23, and therefore the rejection of claim 23 applies to claim 4.

7.   Claims 6 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menand'213 [EP

0 680 213 A2] in view of Steinberg [US 6,006,039 A] as applied to claims 1, 2, 9, 20, 21, 26, 27, 31, 39,

43, 46 and 51 above, and further in view of Bestler et al. [US 5,608,732 A; hereinafter Bestler].

        Referring to claim 25, Menand'213, as modified by Steinberg, discloses all the limitations of

claim 25 except that does not teach said downloaded loader is adapted to replace a portion only of said

software stored in said receiver/decoder by a corresponding portion of said software downloaded thereby.

Bestler discloses an television distribution system, wherein a loader (i.e., download executive 23 of Fig.

1) is adapted to replace (i.e., update) a portion only of an software (i.e., data) stored (See col. 13, lines 14-

16; wherein in fact that a series of packets which are to be processed to download a particular record set

implies said downloaded loader (i.e., download executive) replaces (i.e., download for updating) a portion

only (i.e., particular record set) of a software (i.e., data) stored (i.e., record set)) in a receiver/decoder (i.e.,

Cable system 10 comprising headend 11 and decoder 12 in Fig. 1) by a corresponding portion of said

software (i.e., data) downloaded (See col. 13, lines 32-35) thereby (See col. 13, lines 14-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to have included said data updating feature, as disclosed by Bestler, in said downloaded data loader,

as disclosed by Menand'213, as modified by Steinberg, for the advantage of saving a lot of time being

spent downloading data since said data updating feature supports downloading a necessary portion of data

instead of a full set of data, which is a common sense to one of ordinary skill in the art at the time the

invention was made.

        Referring to claim 6, the method steps of claim 6 are inherently performed by the apparatus of

claim 25, and therefore the rejection of claim 25 applies to claim 6.

8.   Claims 29 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menand'213

[EP 0 680 213 A2] in view of Steinberg [US 6,006,039 A] as applied to claims 1, 2, 9, 20, 21, 26, 27, 31,

39, 43, 46 and 51 above, and further in view of Metz et al. [US 5,666,293; cited by the Applicant; hereinafter Metz].

Referring to claim 29, Menand'213, as modified by Steinberg, discloses all the limitations of claim 29 except that does not teach a directory version identification.

Metz discloses a downloading means (i.e., means for downloading operating system software; See Abstract) is arranged to determine whether a directory version identification (i.e., operating system version number) of a currently transmitted directory table (i.e., operating system broadcast on the network; See col. 9, line 61) is more recent than (i.e., differs from; See col. 9, line 66) said directory version identification of a previously downloaded directory table (i.e., currently running operating system; See col. 9, lines 62-63) having the same TID (i.e., the particular type set-top terminal; See col. 9, lines 56-58) as said currently transmitted directory table (See col. 9, line 65 through col. 10, line 1), and if not (i.e., the same as; See col. 9, lines 61-62), to abort said downloading of said loader (i.e., operating system; See col. 9, lines 60-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said version control, as disclosed by Metz, in said directory/code module upgrading, as disclosed by Menand'213, as modified by Steinberg, for the advantage of obviating an unnecessary upgrading said modules so as to use said receiver/decoder downloading bandwidth effectively, which is well known to one of ordinary skill in the art of computer at the time the invention was made.

Referring to claim 49, the method steps of claim 49 are inherently performed by the apparatus of claim 29, and therefore the rejection of claim 29 applies to claim 49.

9.   Claims 28, 47, 48 and 50 rejected under 35 U.S.C. 103(a) as being unpatentable over Menand'213 [EP 0 680 213 A2] in view of Steinberg [US 6,006,039 A] as applied to claims 1, 2, 9, 20,

21, 26, 27, 31, 39, 43, 46 and 51 above, and further in view of Menand et al. [EP 0 680 216 A2; cited by

the Applicant; hereinafter Menand'216].

Referring to claim 28, Menand'213, as modified by Steinberg, discloses all the limitations of

claim 28 including said downloading means (i.e., system loader; Menand'213) is arranged to download a

directory table (i.e., a directory module; See Menand'213, col.2, lines 36-40) except that does not teach

said downloaded directory table having a predetermined TID and containing, for each of a plurality of

version identifications of a receiver/decoder, a respective TID associated with that version identification.

Menand'216 discloses a method for formulating an interactive TV signal, wherein a directory table (i.e.,

directory module; See TABLE II in Fig. 6) having a predetermined TID (i.e., application identifier; AID

in Fig. 6) and containing, for each of a plurality of version identifications (i.e., module version numbers in

Fig. 6) of a receiver/decoder (i.e., interactive TV system in Fig. 1), a respective TID (i.e., application

identifier) associated with that version identification (See Fig. 6 and page 5, lines 53-58), to determine

said version identification of said receiver/decoder (See page 5, lines 39-40), and to download a directory

table (i.e., directory module) having a TID associated with a version number of said receiver/decoder (See

page 5, lines 40-41) and a predetermined TID-extension (i.e., module identifier; See TABLE II in Fig. 6

and page 5, lines 41-42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to have included said predetermined TID and said version identifications in said directory table, as

disclosed by Menand'216, in said directory table, as disclosed by Menand'213, as modified by Steinberg,

so as to update said downloaded modules responsive to detecting a change in said data version

identification (i.e., module version number; See page 5, lines 39-41 in Menand'216).

Referring to claims 47 and 48, the method steps of claims 47 and 48, respectively, are inherently

performed by the apparatus of claim 28, and therefore the rejection of claim 28 applies to claims 47 and

48, respectively.

Referring to claim 50, Menand'213, as modified by Steinberg, discloses all the limitations of

claim 50 except that does not teach a software version identification of said software in said bitstream.

Menand'216 discloses a method for formulating an interactive TV signal, wherein a formulated bitstream

(i.e., packet stream) includes a data version identification (i.e., module version number; See Fig. 5 and 6)

of a data (i.e., module).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to have included said data version identification, as disclosed by Menand'216, in said bitstream of

said data, as disclosed by Menand'213, as modified by Steinberg, so as to update a downloaded executing

application responsive to detecting a change in said data version identification (i.e., module version

number; See Menand'216, page 5, lines 39-41).

Menand'213, as modified by Steinberg and Menand'216, discloses determining, at said receiver/decoder,

whether said software version identification of received software is more recent than said software

version identification of currently stored software (See Menand'216, page 5, lines 39-40); and

downloading said received software from said bitstream data if said received software is more recent (See

Menand'216, page 5, lines 40-41).

10.   Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Menand'213 [EP 0 680

213 A2] in view of Steinberg [US 6,006,039 A] and Menand'216 [EP 0 680 216 A2] as applied to claims

28, 47, 48 and 50 above, further in view of Hearing [US 5,787,017 a].

Referring to claim 13, Menand'213, as modified by Steinberg and Menand'216, discloses all the

limitations of claim 13 except that do not teach said version identification comprises a code for the

version of said receiver/decoder and a code for the manufacturer of said receiver/decoder.

Hearing discloses a data acquisition apparatus, wherein it displays an version identification (i.e.,

identification message) comprises a code for the version of said receiver/decoder (i.e., version number of

said apparatus) and a code for the manufacturer of said receiver/decoder (i.e., name of manufacturer).

Refer to col. 4, lines 60-63.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to have included said identification message, as disclosed by Hearing, in said version identification,

as disclosed by Menand'213, as modified by Steinberg and Menand'216, so as to provide an abundant

information on said version identification for a better version control, which is a well-known in the art of

production version control.

11.   Claims 34, 35 36, 44, 45, 52 and 53 rejected under 35 U.S.C. 103(a) as being unpatentable over

Menand'216 [EP 0 680 216 A2] in view of Menand'213 [EP 0 680 213 A2] and Steinberg [US 6,006,039

A].

       Referring to claim 52, Menand'216 discloses a transmission system (i.e., interactive TV system in

Fig. 1) comprising: means for transmitting (See page 4, lines 16-17) a bit stream (i.e., signal stream; See

Fig. 8,9 and page 4, line 24) including at least one loader (i.e., interactive application; See page 3, lines

18-19); and means for dividing (See page 3, lines 19-22) said at least one loader (i.e., interactive

application) into a plurality of modules (i.e., modules; See page 3, lines 33-34) and dividing said software

(i.e., interactive component data; See page 3, line 35) associated with said at least one loader into a

respective plurality of modules (i.e., application data module; See page 3, line 33) for transmittal by said

transmitting means (e.g., satellite transponder; See page 4, lines 16-17).

Menand'216 does not disclose said at least one loader for loading an application into a receiver/decoder.

Menand'213 discloses a loader (i.e., autostart module; See col. 2, lines 40-43 and col. 7, lines 42-50) for

loading an application (See col. 6, lines 16-18 and 23-41) into a receiver/decoder (See col. 2, line 36

through col. 3, line 2 and col. 7, lines 28-53), and said software associated with said at least one loader

(i.e., a plurality of associated data modules to said code modules; See col. 1, line 53 through col. 2, line

24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said loader, as disclosed by Menand'213, in said interactive application, as disclosed by Menand'216, so as to load an associated application from said bitstream into said receiver/decoder (See Menand'213, col. 7, lines 46-51).

Menand'216, as modified by Menand'213, does not expressly teach said software is in native code (i.e., hardware specific code, which is directly executable by a microprocessor).

Steinberg discloses a method for configuring a camera through external means (Fig. 1), wherein said method sets a software (an operating system of a camera) through transmitter and receiver (external means), i.e., downloading a native code (i.e., an executable code) for redoing a firmware (i.e., patching firmware; See col. 1, lines 61-64; i.e., wherein in fact that said method sets an operating system of a camera through an external means, i.e., downloading an executable code for redoing a firmware clearly anticipates that said software (i.e., downloaded to said receiver/decoder) is in native code (i.e., directly executable code by Processor 122 of Fig. 4 as a new operating system)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied said method of downloading in native code, as disclosed by Steinberg, to said receiver/decoder system, as disclosed by Menand'216, as modified by Menand'213, so as to provide the capability of changing said software (i.e., camera operating system) and downloading said software in native code (i.e., executable code; See Steinberg, col. 2, lines 47-50) with the advantage of allowing said software in said bitstream (i.e., application) to execute faster than if each byte in said bit stream must interpreted and executed at run-time, which is well know to one of ordinary skill in the art at the time the invention was made, as shown in Pedersen [US 5,961,586 A] as a prior art of back-up reference (See Pedersen, col. 11, lines 6-7 and lines 11-13).

Referring to claim 35, Menand'216 discloses means for generating a directory table (i.e., directory module; See page 5, lines 51-58) having a predetermined table identification ("TID";

Application Identifier AID; See Fig. 6 and page 5, lines 54-55) and containing, for each of a plurality of

version identifications (i.e., module version numbers in Fig. 6) of a receiver/decoder (i.e., interactive TV

system in Fig. 1), a respective TID (i.e., application identifier) associated with that version identification

(See Fig. 6 and page 5, lines 53-58).

Referring to claim 36, Menand'216 discloses means for including in each transmitted table (i.e.,

module) a version identification (i.e., module version number; See Fig. 5,6; therefore (See page 5, lines

39-40).

Referring to claim 53, Menand'216 discloses means for formatting each of said modules of said

at least one loader as a respective table (i.e., directory module; See TABLE II in Fig. 6 and page 5, lines

51-54), said table of said at least one loader having the same respective table identification ("TID";

Application Identifier AID; See Fig. 6 and page 5, lines 54-55) and respective different table

identification extension ("TID-extension"; i.e., module identification for code/data module; See Module

Identifier in Fig. 5,6);and means for formatting each of said modules of said software associated with said

at least one loader (See page 3, lines 32-35) as a respective table (See TABLE II "respective table for

each module" in Fig. 6), said tables of said loader modules associated therewith (See page 5, lines 56-57)

and respective different TID-extensions (i.e., module identification for code/data module).

Referring to claim 34, Menand'216, as modified by Menand'213 and Steinberg, discloses said

tables have respective different TID-extensions (i.e., service component identifications for respective

transport packets in the transmission unit header; See Menand'216, page 3, lines 19-35 and page 7, lines

1-4) other than a predetermined TID-extension (i.e., module identification for code/data module; See

Menand'216, Module Identifier in Fig. 5 and Fig. 6); said system further comprising a respective

directory tables (i.e., directory module; Menand'216) for said plurality of modules having the same TID

(i.e., the same directory module identification; See Menand'213, col. 14, lines 41-44), each directory table

having that TID (i.e., AID; See Menand'216, Fig. 6) and said predetermined TID-extension (i.e., module

identification for code/data module; Menand'216), said directory <u>table</u> (i.e., directory module;

Menand'216) containing for each of said modules a name of that module (i.e., string table for module

names; Menand'216) and the respective TID-extension (i.e., module identifier; See Menand'216, Fig. 6

and page 5, lines 53-58).

Referring to claim 44, the method steps of claim 44 are inherently performed by the apparatus of

claim 53, and therefore the rejection of claim 53 applies to claim 44.

Referring to claim 45, the method steps of claim 45 are inherently performed by the apparatus of

claim 34, and therefore the rejection of claim 34 applies to claim 45.

Response to Arguments

12.   Applicant's arguments filed on 24th of April, 2003 have been fully considered but they are not

persuasive.

In response to the Applicant's argument with respect to Jessup reference on the Response page

16, line 18 through page 17, line 3 and Paragraph C on page 17, the Examiner has never referred to Jessup

reference in the Office Actions of the record (See the instant and prior Office Actions of the record).

Thus, the Applicant's argument on this point is not persuasive.

In response to the Applicant's argument with respect to "Therefore, the system loader, which

loads the autostart module through API calls, also loads the other modules using API calls. Thus, Menand

does not teach "downloading into the receiver/decoder a loader in native code for loading the software

from the bitstream," as recited in claim 1, because a new loader is not being downloaded to download

software" on the Response page 13, lines 14-17, the Examiner respectfully disagrees. In contrary to the

Applicant's statement, the autostart module loads the other modules using API calls (See Menand'213,

col. 2, lines 40-43 and col. 7, lines 49-51). Furthermore, the Examiner believes that the Applicant

misinterprets the statement "These *API calls*[#1] from the system loader" in Menand'213, col. 7, lines 32-33,

and the statement "This program may possibly load other code and data modules, and chain to another

code module, all via *API calls*[#2]" in Menand'213, col. 7, lines 49-51. Menand'213 states the system loader

executes *API calls*[#1] to the flow operating system (See Menand'213, col. 7, lines 28-29), and also states

this program may possibly load ... , all via *API calls*[#2]. Those two API calls are different calls to the flow

of operating system, such that the *API calls*[#1] are initiated by the system loader for loading the autostart

module (i.e., loader), and the *API calls*[#2] are initiated by the autostart module for loading other code and

data modules, and chain to another code module. However, the Applicant asserts as if all API calls are

initiated by the system loader, which is not acceptable by one of the ordinary skill in the art in light of the

disclosure in Menand'213. Thus, the Applicant's argument on this point is not persuasive.

In response to the Applicant's argument with respect to "the autostart module is (1) part of the

application and (2) begins execution of the application; it simply is the initiating part of the application;

Thus, the autostart module is not a new loader, because the autostart module does not load subsequent

modules" on the Response page 13, line 18 through page 14, line 1, the Examiner respectfully disagrees.

In contrary to the Applicant's statement, Menand'213 teaches, in fact, that the autostart module, which is

loaded by the system loader, performs the remainder of the initialization and begins execution of the AVI

program, which may possibly load other code and data modules clearly anticipates a downloading means

(i.e., system loader) loads a new loader (i.e., autostart module), which load other code and data modules

(i.e., software). Refer to Menand'213, col. 7, lines 28-51. Furthermore, the scope of the claimed invention

does not necessarily require (A) the new loader cannot be located within an application, and (B) the new

loader cannot begin execution of the application, in accordance with a broad interpretation. In other

words, it is noted that the features upon which applicant relies (i.e., the above mentioned items (A) and

(B)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the

specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988

F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Thus, the Applicant's argument on this point is not

persuasive.

In response to the Applicant's argument with respect to Menand & Mulchandani further in view of Bowen, Bestler, Metz and Hearing on Response page 15, Paragraph B, the Examiner believes that the Applicant misinterprets the claim rejections. The Applicant essentially argues that each one of Bowen, Bestler, Metz, and Hearing, does not teach that a downloading a loader in native code, which in turn downloads software in native code. However, Menand'216, as modified by Steinberg and all of the other art cited, discloses all the argued elements with rationale for appropriate combination of the references (See the instant Office Action under 35 U.S.C. 103(a) rejections). Thus, the Applicant's argument on this point is not persuasive.

13.   Applicant's arguments with respect to claims 1, 20, 39, 52 and their dependent claims have been considered but are moot in view of the new ground(s) of rejection.

In response to the Applicant's argument with respect to the subject matter "loader and software in native code", the Examiner brought Steinberg, Pedersen references in the rejection for the limitations which are not provided by Menand'213, Menand'216 and all of the other art cited (See Paragraphs 5-11 in the instant Office Action).

Conclusion

14.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

With regard to application in native code,

Johnson et al. [US 5,987,135 A] disclose system and method for controlling and monitoring remote distributed processing system.

Elbers et al. [US 5,950,005 A] disclose method for storing a multimedia title including an occurrence table and an execution profile table therefore unitary storage medium provided with such title and a platform subsystem for evaluating memory and processing requirements for such application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E. Lee whose telephone number is 703-305-5950. The examiner can normally be reached on 9:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H. Rinehart can be reached on 703-305-4815. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Christopher E. Lee
Examiner
Art Unit 2189

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June 1, 2003
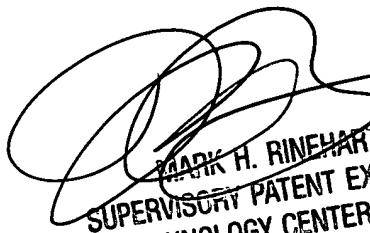
MARK H. RINEHART
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100